



Yakitori Grill

Written By: Bob Knetzger



TOOLS:

- [Bench grinder \(1\)](#)
for deburring and sharpening
- [Center punch \(1\)](#)
- [Drill \(1\)](#)
- [Hacksaw \(1\)](#)
- [Hammer \(1\)](#)
- [Marker \(1\)](#)
- [Measuring tape \(1\)](#)
- [Pop rivet tool \(1\)](#)
- [Safety gloves \(1\)](#)
- [Sandpaper \(1\)](#)
- [Scrap wood block \(1\)](#)
at least as thick as depth of cake pans
- [Straightedge \(1\)](#)
- [Vise-grips \(1\)](#)
ideally needlenose



PARTS:

- [Cake pans \(2\)](#)
also sold as deep-dish pizza pans. We found them at webstaurantstore.com
- [L-straps \(2\)](#)
- [Aluminum sheet \(1\)](#)
- [Pop rivets and washers \(14\)](#)
- [Corks \(16\)](#)
Use real cork corks from wine bottles, not the new synthetic ones.
- [Machine screws \(2\)](#)
- [Spray paint \(1\)](#)
used for grills or wood stoves
- [Stainless steel rod \(1\)](#)
about 12' such as McMaster-Carr #89535K22, mcmaster.com
- [Charcoal \(1\)](#)

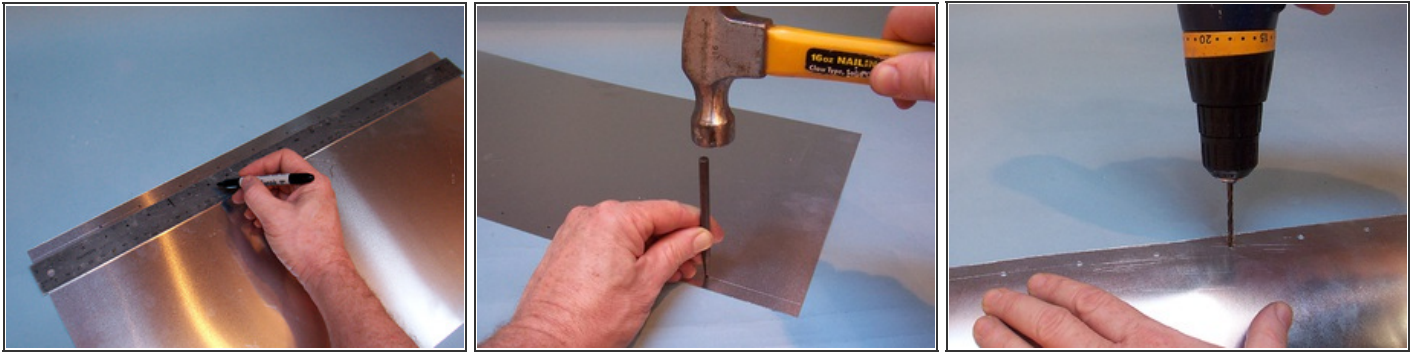
SUMMARY


One of the most memorable and delicious aspects of travel is sampling the local foods. A trip to Japan gave me a chance to enjoy favorites like takoyaki (octopus fritters), okonomiyaki (cabbage frittatas), and other Asian eats in their native setting. A new (to me) treat was yakitori, a simple bar food snack of grilled chicken.

In the Tokyo neighborhood of Shinjuku, I saw (and smelled) enticing restaurants featuring sizzling street-side grills. Unlike big American grills that cook anything from burgers to ribs to steaks, these specially sized grills were designed to do one thing and one thing only: skewers. Short skewers loaded with chicken, asparagus, meatballs, and other simple ingredients spanned the narrow troughs of red-hot coals. The suspended foods cooked quickly and without burning or sticking to a grate or grill surface. And the offerings included nearly all the parts of the chicken, from succulent breast (torinku) to crunchy cartilage (nankotsu) and delicate, crispy chicken skin (torikawa). Yum!

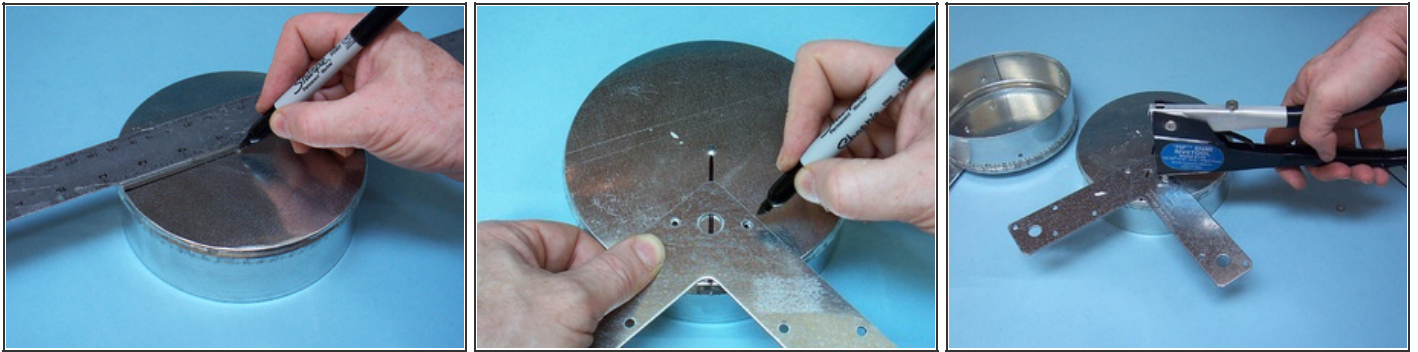
Back home, I wanted a way to cook yakitori myself, so I came up with this easy-to-make grill design and some specially designed roll-proof, double-crook skewers. Use them to try delicious yakitori recipes.

Step 1 — Prepare the metal sheet.



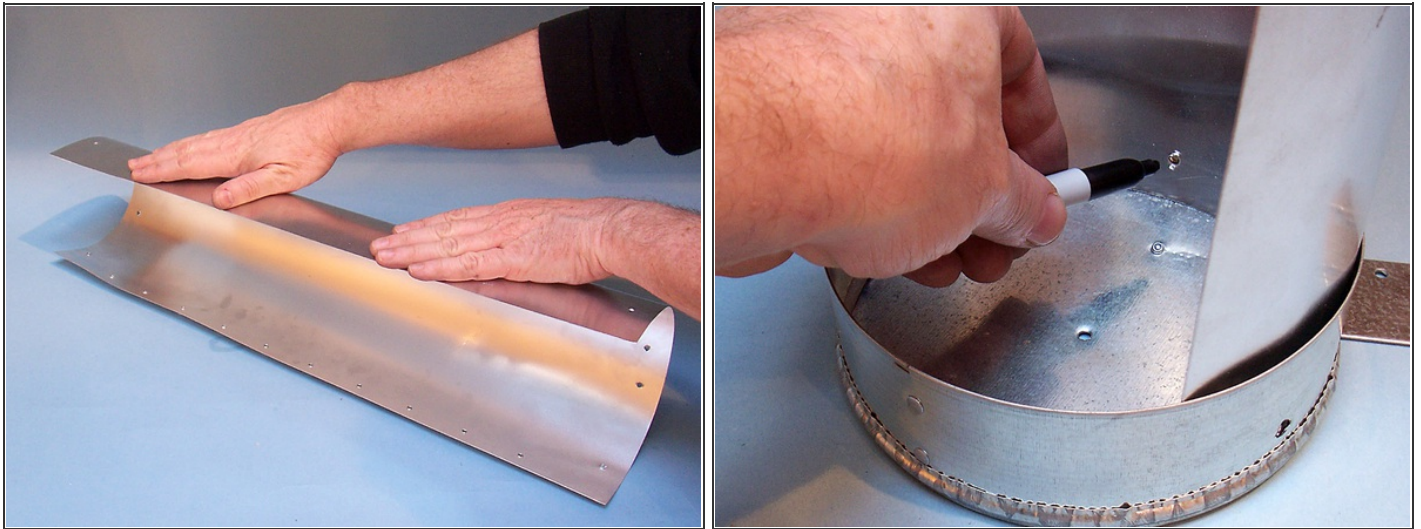
- **WARNING:** Don't use galvanized steel for the main body of the grill. The zinc coating gives off dangerous fumes when heated — not good for a food-making project! 
- Sand down any sharp edges or burrs on the aluminum sheet with 100-grit sandpaper. For extra safety, wear gloves when handling the sheet metal.
- Measure and mark a series of 5/32" holes that will serve as holders for the skewers. Make a line 1/2" below the 24" edge of the aluminum sheet. Starting 3" from the end, measure and mark 10 holes with 2" between their centers.
- Use the center punch and hammer to make dimples, to keep the drill bit from wandering when you drill. Then drill all 10 holes.
- Drill 5 holes along each short end of the sheet. These holes will be for attaching the pop rivets to the rims of the cake pans. Draw a line 1" in from the edge, then measure, mark, and punch the position of 1 hole at dead center, 6" in from each side. Then do the same for 2 holes 1" from each side, and 2 holes 3 1/2" from each side. Drill them with the 3/32" bit.

Step 2 — Prepare the pans.



- Find the center of the pan, mark, and punch. Draw a line from the center to the rim of the pan. Use this line to center the L-strap legs, and carefully mark the location of the L-strap holes on the pan.
- Use a block of wood as a support inside the pan. Center-punch and drill all 3 holes. Repeat with the other pan so they're identical.
- Use a pop rivet, with a washer on the inside, to fasten the L-strap leg to the outside of the pan. Repeat with the other pan and leg.

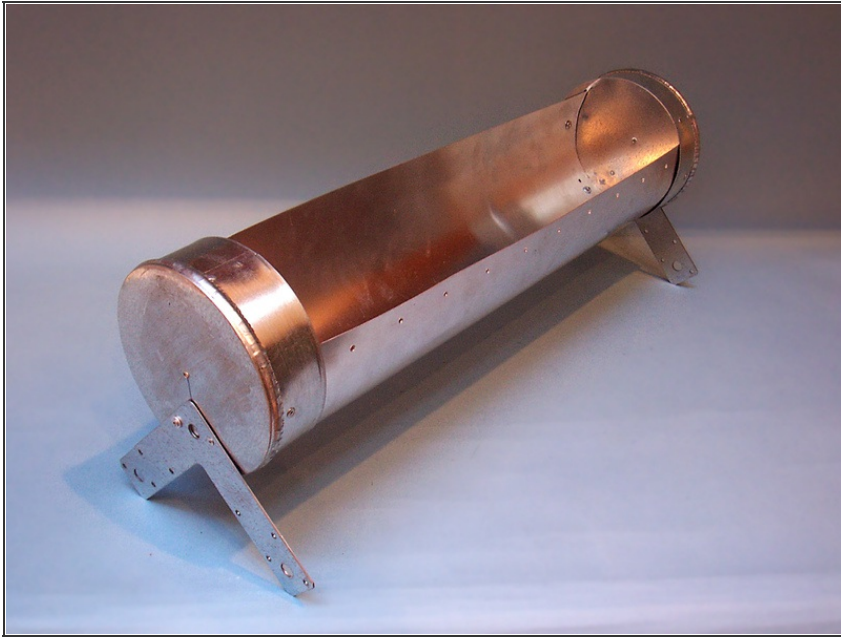
Step 3 — Test-fit the parts.



- Gently roll the aluminum sheet to the 6"-diameter curve. Don't try to bend it all in one pass, just slightly curve it against a tabletop, and slowly and gradually roll the sheet to bend the curve as you go. Check your progress using a pan.
- Now "dry-fit" the parts. Place the curved trough inside the end caps on a flat, even surface, making sure all 4 feet are level and touching at the same time.
- Hold the pans tight against the curved edge of the sheet, and mark the location of the holes in the sheet on the inside of the caps.
- I adjusted the position of the side with the holes so that it was $\frac{1}{2}$ " lower than the other side — this will help level the double-crook skewers if you want to make and use them with the grill. If you want to use ordinary bamboo skewers, just center the trough. In any event, it's not critical.
- If you'll grill in a windy area, you could make the trough a little deeper, or even design a lid for it.
- Now use the holes already drilled in the trough to mark the locations of the matching holes in the pans. Use a marker to carefully mark the position of each hole on the inside rim of each pan.
- Strike the marks gently with a center punch, then flip over and punch the same marks from the other side to convert them to dimples on the outside of the rim. That will make it easier to drill from the outside. Support with a wood block inside and drill the matching $\frac{5}{32}$ " rim holes.

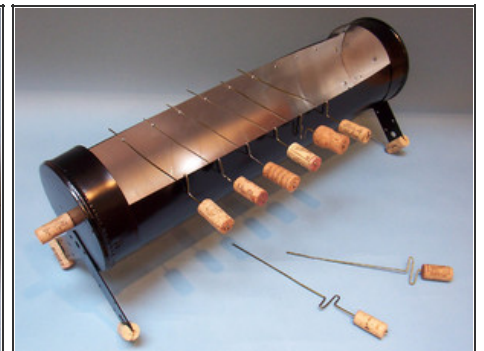



Step 4 — Assemble and paint.



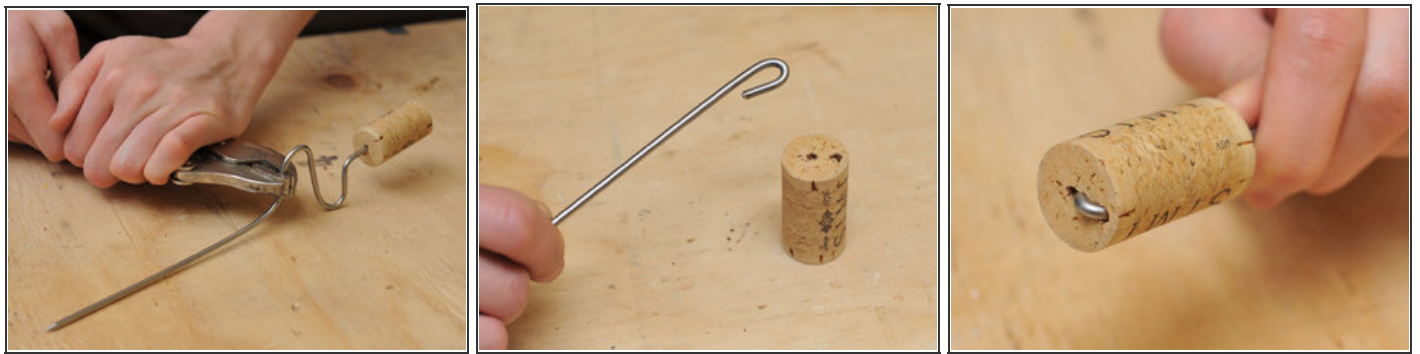
- Line up the holes on the trough and the pans, and connect them with pop rivets. Use washers to back up on the inside and ensure snug riveting.
- Mask off the inside surfaces with paper and masking tape. Then paint with 2 coats of high-temp stove paint. Let dry overnight.

Step 5 — Make the feet and handles.



- For the feet, use a hobby knife to make a slit along the length but not all the way to the end of a cork, as shown. Carve out a little more cork material to make a slot that will fit snugly on the edge of the leg. Make 3 more cork pads, one for each foot.
- If the corks are loose, use some wire to poke through the cork and a hole in the leg. Twist the wire to secure. 
- Drill a 1/8" hole through the axis of 2 corks. Use a small flathead bolt to fasten the cork to the center hole on the end cap with a washer and nut on the inside. Tighten the nut very snugly to pull the bolt head flush with the cork — you don't want to touch the metal bolt when you pick up the grill by these insulated cork handles.

Step 6 — Make the skewers.



- To make the double-crook skewers, cut the steel rods to about 14" lengths, then use vise-grips to make the bends as shown. Dimensions aren't critical, but make the bends into a zigzag shape.
- Drill a 3/32" hole through the center axis of a wine cork and drill a second, shallow, 3/32" hole between the center and the edge of the cork.
- Thread the cork on the short end of the skewer. Use the needlenose pliers to make a very tight U-shaped bend at the end of the wire. Then slide the bent end into the second hole on the cork. This gives the skewer an insulated handle that won't spin. Make as many skewers as you like.
- If you don't want to make these special skewers, you can use any kind of skewers. Look for flat cross-section bamboo skewers if you can find them — they'll rest on the grill edge without rolling until you flip them.

Let's get cookin'

Put the grill on a fireproof surface away from any flammable vegetation or structures. Use crumpled paper and make a mound of charcoal in the center of the grill. For best flavor use binchotan (special Japanese high-carbon content, "white" charcoal) or mesquite and avoid chemical starters. Light the coals and let them burn until uniformly covered in white ash — about 30 minutes. Can't wait? Use your shop vac with the hose on the outlet as a blower to fan the flames. You'll have red-hot coals in just a few minutes, but be careful — don't blow hot embers all over, go easy!

MAKE: Recipe

Yakitori (Chicken on Skewers)

Ingredients

1lb boneless chicken thighs, with or without skin $\frac{3}{4}$ cup mirin (sweet rice wine) $\frac{1}{2}$ cup soy sauce $\frac{1}{2}$ cup sake $\frac{1}{4}$ cup sugar
Skewers

Combine mirin, soy sauce, sake, and sugar in a small pan and boil over medium heat until slightly thickened.

Cut chicken into bite-size chunks or strips. Thread the meat evenly on the skewers, centering on the skewer to fit inside the grill. If using bamboo skewers, soak them in water first to prevent burning. Brush with sauce.

Spread the coals to make a uniform layer along the middle of the trough. Insert the skewers into the holes. Rotate the skewers every few minutes, brushing on more sauce. Repeat until golden brown.

This project first appeared in [MAKE Volume 30](#), page 108.

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